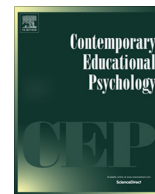




Contents lists available at ScienceDirect

## Contemporary Educational Psychology

journal homepage: [www.elsevier.com/locate/cedpsych](http://www.elsevier.com/locate/cedpsych)

## Empirical study

## What makes good and bad days for beginning teachers? A diary study on daily uplifts and hassles

Juliane Schmidt<sup>a,\*</sup>, Uta Klusmann<sup>a</sup>, Oliver Lüdtke<sup>a,b</sup>, Jens Möller<sup>c</sup>, Mareike Kunter<sup>d</sup><sup>a</sup> Leibniz Institute for Science and Mathematics Education at Kiel University, Olshausenstrasse 62, 24118 Kiel, Germany<sup>b</sup> Centre for International Student Assessment, Germany<sup>c</sup> Institute for Psychology of Learning and Instruction, Kiel University, Olshausenstrasse 75, 24118 Kiel, Germany<sup>d</sup> Institute of Psychology, Department of Educational Psychology, Goethe University Frankfurt, Theodor-W.-Adorno-Platz 6, 60629 Frankfurt, Germany

## ARTICLE INFO

## Article history:

Available online xxxx

## Keywords:

Beginning teachers  
Daily hassles and uplifts  
Emotional exhaustion  
Diary study

## ABSTRACT

Beginning teachers' first years in school have been described as demanding and stressful. In explaining beginning teachers' stress, previous research mainly focused on either trait-like personality characteristics or general work-related stressors. In contrast, the present study focused on the day-to-day experience. The aim of the current study was (a) to identify the task-related daily uplifts and hassles of beginning teachers, (b) to examine the association of daily uplifts and hassles with teachers' socio-demographic and personality characteristics, and (c) to investigate the effect of daily uplifts and hassles on teachers' emotional exhaustion. The sample consisted of 141 beginning teachers up to four years in the profession who completed an online diary for 14 consecutive days. Results showed that most daily uplifts and hassles were related to teaching in class and interacting with colleagues. Both hassles and uplifts showed only a few unsystematic correlations with teachers' characteristics. However, daily uplifts and hassles significantly explained beginning teachers' daily emotional exhaustion.

© 2016 The Authors. Published by Elsevier Inc. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

The first years of teaching are an important phase in the professional development of teachers. After the transition to practice, beginning teachers are confronted with the real-life tasks of teaching and are supposed to transfer their knowledge to performance (Tynjälä & Heikkinen, 2011). However, there is evidence that beginning teachers have difficulties in adapting to the challenges of working life and that this results in high rates of job turnover within the first five years of teaching (Dicke, Parker, et al., 2015; OECD, 2005). Beginning teachers constantly report not feeling well-prepared for the reality of the classroom (Hebert & Worthy, 2001).

To better prepare young teachers for the transition to working life, it is crucial to know which of their new professional tasks are particularly stressful. However, previous research on the reasons for beginning teachers' experience of stress has mainly focused either on trait-like personality characteristics (e.g.,

Klassen & Durksen, 2014; Klusmann, Kunter, Voss, & Baumert, 2012), different aspects of social support (e.g., Chan, 2002; Richter, Kunter, Lüdtke, Klusmann, & Baumert, 2011), or stable work-related stressors (e.g., Chaplain, 2008; Veenman, 1984). Instead, we argue that, in order to understand the professional tasks that are particularly stressful, teachers' day-to-day experience must be focused on, since students, colleagues, and the teachers themselves behave differently every day. Therefore, both the occurrence of stressors and beginning teachers' stress might fluctuate from day to day (Goetz, Lüdtke, Nett, Keller, & Lipnevich, 2013; Ilies, Huth, Ryan, & Dimotakis, 2015; Tsai, Kunter, Lüdtke, Trautwein, & Ryan, 2008).

We conducted a diary study over 14 days with 141 beginning teachers who had up to four years of work experience. Every day, participants reported on work-related hassles and uplifts and on their emotional exhaustion. In the present paper, we address three research questions. First, using an idiographic-nomothetic approach, we aimed to describe, from a day-to-day perspective, which work-related tasks, such as teaching, preparing lessons, interacting with colleagues, counseling parents, or working on school development, are most frequently reported in terms of hassles and uplifts. Second, we addressed the question of how daily hassles and uplifts are related to certain teachers' characteristics, such as work experience and neuroticism. Third, we investigated

\* Corresponding author.

E-mail addresses: [j.schmidt@ipn.uni-kiel.de](mailto:j.schmidt@ipn.uni-kiel.de) (J. Schmidt), [klusmann@ipn.uni-kiel.de](mailto:klusmann@ipn.uni-kiel.de) (U. Klusmann), [oluedtke@ipn.uni-kiel.de](mailto:oluedtke@ipn.uni-kiel.de) (O. Lüdtke), [jmoeller@psychologie.uni-kiel.de](mailto:jmoeller@psychologie.uni-kiel.de) (J. Möller), [kunter@paed.psych.uni-frankfurt.de](mailto:kunter@paed.psych.uni-frankfurt.de) (M. Kunter).

whether daily hassles and uplifts predict beginning teachers' emotional exhaustion on a daily level.

## 2. Theory

### 2.1. Beginning teachers' transition to working life

It has been repeatedly suggested that beginning teachers are especially vulnerable to high levels of stress after the transition to working life. Their stress reaction has also often been described as a reality shock (Goddard, O'Brien, & Goddard, 2006; Veenman, 1984). It is assumed that this phenomenon is reflected in psychological and physiological complaints, changes of attitudes and personality, and emotional instability (Le Maistre & Paré, 2010). It has been argued that a reality shock is—among other reasons—due to the fact that beginning teachers are immediately confronted with all the real-life tasks of the teaching profession, such as teaching, lesson planning and preparation, interacting with colleagues, and organizational tasks, and also have full pedagogical responsibility (Tynjälä & Heikkinen, 2011).

The transitional phase has thereby been described in three distinct phases: a pre-entry or anticipation phase, when the transition is foremost in the mind of the individual, making preparation vital; an encounter or confrontation phase shortly after the transition, in which young professionals face multiple changes almost simultaneously; and, finally, a recovery or adaptation phase, during which individuals adapt to the new requirements (c.f. Nicholson, 1984; Reicherts & Pihet, 2000). The confrontation phase in particular has been regarded as a highly stressful period of time and has also been called the “survival stage” (Fuller & Brown, 1975; Huberman, 1989). However, Huberman (1989) also included positive aspects in the first stage of teaching, referring to a “phase of discovery,” which describes beginning teachers' experience of initial enthusiasm. The length of the confrontation phase and how long teachers can be regarded as beginning have been unequally described. Huberman (1989) suggested that the confrontation phase covers the first three years in the teaching profession. Veenman (1984) described beginning teachers as those who have been working up to two years, whereas Lavigne (2014) also included teachers who had been working up to five years.

Empirical studies covering different phases of the transition into teaching practice are rare. Many studies in this field are cross-sectional and vary in their understanding of the first teaching experience. The first practical experience in the context of university teacher education is seen as highly stressful for student teachers (Chan, 2002; Chaplain, 2008; Fives, Hamman, & Olivarez, 2007). The few longitudinal studies covering the first years of teaching after graduation predominantly report small to medium increases in burnout levels within the first year (Dicke, Parker, et al., 2015; Goddard et al., 2006; Klusmann et al., 2012) but also for the first three years of teaching (Hultell, Melin, & Gustavsson, 2013). Only Gavish and Friedman (2010) found a slight decrease in emotional exhaustion during the first year of teaching. Taken together, these studies lend empirical support to the view that the first teaching experience is stressful. Therefore, the question arises as to what in particular makes the first teaching experience stressful.

### 2.2. Stressors and resources of beginning teachers

Identifying the individual or work-related characteristics that enhance or reduce beginning teachers' stress has inspired many empirical studies, which follow the theoretical guidance of the transactional stress model of stress and coping (Lazarus & Folkman, 1984) or the job demands-resources model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). Self-efficacy (e.g., Fives

et al., 2007), occupational self-regulation, and professional knowledge of classroom-management (Dicke, Parker, et al., 2015; Klusmann et al., 2012) were revealed as protective individual characteristics that reduce the stress experience of beginning teachers. In terms of work-related characteristics, social interaction with students seems to be a major issue in beginning teachers' working life. Starting with Veenman's (1984) literature review, classroom discipline was the most important problem for beginning teachers, followed by motivating students, dealing with heterogeneity, assessing students' work, and relationships to students. More recently, in an interview study with beginning teachers, Goddard and Foster (2001) found almost the same problems as reported by Veenman (1984): classroom management, motivating students, assessing students' work, or relationships to parents. Chaplain (2008) asked beginning teachers how stressful they found different aspects of their job and derived four categories of stressors: managing students' behavior, organizational tasks and time pressure, lack of support from colleagues, and self-worth. The greatest number of stressors dealt with the management of students' behavior.

As previous research focused on work-related stressors, less is known about potential factors that reduce beginning teachers' stress. Kyriacou and Kunc (2007) investigated the experiences of 28 beginning teachers within their first two years of teaching. Most positive experiences were related to students' success and supportive colleagues. Uusiautti, Harjula, Pennanen, and Määttä (2014) reported from qualitative interviews with 14 beginning teachers within the first year of teaching that support of colleagues and positive interaction with students increase teachers' well-being. Consistently, Richter et al. (2011) reported from a large-scale study that social support of mentors is experienced as the main resource of beginning teachers. In correspondence with Huberman (1989), these studies indicate that it is necessary to include not only negative but also positive factors when explaining beginning teachers' well-being.

Taken together, research on beginning teachers has indicated that the transition to the teaching profession is experienced as demanding. Thereby, between-person differences in stress have been explained by typical stressors and trait-like characteristics.

### 2.3. Beginning teachers' day-to-day experience: hassles and uplifts

A major life event such as “transition to working life” is likely to have an impact on almost all aspects of daily life (Almeida & Wong, 2009). We propose that gaining a deeper understanding of the demands associated with the transition to working life requires the consideration of individuals' daily experiences. One reason is that the consequences of the transition are manifested on a daily basis in terms of daily hassles and uplifts (Almeida & Wong, 2009). These are distinct events on particular working days, such as teaching a lesson in front of a more or less motivated class, counseling the parents of a difficult student, or having a nice chat with a colleague. Moreover, the new demands associated with the transition will only partly be stable over time, and will rather vary from day to day. Neither students nor colleagues or supervisors can be expected to behave perfectly consistently towards the beginning teacher. Research has also shown that students' interest and motivation are not stable from lesson to lesson, thus making the teacher's task more or less demanding (Goetz, Lüdtke, et al., 2013; Tsai et al., 2008). Similarly, the quantitative and qualitative work load is plausibly different on a daily or weekly basis. Consequently, research on the transition to working life might significantly benefit from studying professional life on a day-to-day level (Bolger, Davis, & Rafaeli, 2003; Malmberg, Hagger, & Webster, 2014).

To understand the experience of beginning teachers, current research on daily stress experience seems helpful. Almeida (2005) suggested an influential model on the daily stress process. In this approach, *daily stressors* are defined as the challenges of daily life, including routine as well as unexpected events appearing in the work and the private domain. Daily stressors can be described by their frequency and content as well as by the subjective appraisal of their severity. Both aspects of daily stressors are assumed to affect individuals' daily well-being. The number of daily events experienced and the extent to which they are experienced as being severe has been described as *stress exposure*. Moreover, the model also included the experience of positive events, in terms of daily uplifts, which are "salient and positive or favorable to the endorser's well-being" (Lazarus, 1984, p. 376).

#### 2.4. Diary studies among beginning teachers

Research on daily stress experience has benefited from the development of diary methods. Here, individuals record their experiences on a daily basis either via the Internet or in mobile phone diaries. Diary methods have three major advantages (Almeida, 2005; Bolger et al., 2003; Reis & Gable, 2000): First, they are close to the real daily life of the target person, preventing concerns about ecological validity. Second, they avoid memory distortions because they ask for reports on very short periods of time and therefore reduce retrospection bias. Third, due to the assessment of individuals across many occasions, diary methods allow the investigation of within-person processes. This makes it possible to shift from a mean-level analysis of groups towards the analysis of processes within a person as individuals' cognitive and emotional experience varies, as do their reactions to daily stressors (Molenaar & Campbell, 2009).

In a groundbreaking study, Malmberg and Hagger (2009) investigated the work experiences of beginning teachers on a daily basis. In a longitudinal study on agency beliefs they also conducted a four-day diary study with a subsample of 20 beginning teachers. Every day, participants were asked whether they had experienced any of ten situations (e.g., "I was observed teaching by a teacher" or "I taught on my own," p. 683) and, additionally, reported on their affect and agency beliefs. Results showed that beginning teachers' agency beliefs could be explained by daily positive and negative affect but not by the experience of certain daily events. The insignificant association between daily events and teachers' agency beliefs might be explained by two facts: First, the authors did not consider the valence of the daily experiences (whether they were positive or negative) and, second, not all relevant daily events might have been recognized when assessing daily experiences by referring to a list of standard situations. Similarly, using a diary approach with beginning teachers, Bakker and Bal (2010) investigated over a period of five weeks whether the relationship between weekly job resources (autonomy, exchange with supervisor, opportunities of development, and social support) and weekly job performance is mediated by weekly engagement. Results showed that weekly job resources were positively associated with weekly engagement and weekly engagement, in turn, was positively related to weekly job performance. Both studies supported the importance of a within-person perspective: First, the variability of teachers' experiences was greater within than between persons, suggesting that beginning teachers experience many personal ups and downs (Malmberg & Hagger, 2009). Second, intra-individual variability in daily experiences and affect could predict important work-related outcomes such as performance or agency beliefs (Bakker & Bal, 2010; Malmberg & Hagger, 2009). However, whereas Malmberg and Hagger (2009) suggested the importance of daily affect, none of the studies could identify stressors and resources which might explain teachers' daily affective experience.

#### 2.5. The present study

The research aim of the current study was to gain a deeper understanding of the task-related difficulties associated with the transition to the teaching profession. We extended previous research by at least three aspects. First, despite investigators' understanding of the transition to the profession as a phase of instability and change, the day-to-day perspective has been almost neglected so far in research on beginning teachers. We therefore conducted a two-week diary study with beginning teachers, including daily reports on their work experience and well-being. Second, we focused not only on negative aspects; in line with the models of Huberman (1989) and Almeida (2005), we also included positive events as uplifts. Third, we used an idiographic-nomothetic approach (Emmons, 1986; Little, 1983; see also Tennen, Affleck, Armeli, & Carney, 2000) to assess daily hassles and uplifts. This approach combines two parts: In the idiographic part the focus lies on the subjective experiences of the individual. In the nomothetic part the focus is on studying general laws by abstracting the experiences into superordinate categories and comparing them between persons. In the present study, the idiographic part meant that participants reported their daily experiences in an open answer format resulting in qualitative data at first. Consequently, participants were not influenced by the content of a given list of stressors and resources, which enabled us to gain knowledge not only on task-related difficulties but also on positive events, thus including all possible aspects of teachers' daily working life. This is particularly important because there is no generally accepted taxonomy for relevant positive and negative experiences of teachers. In the nomothetic part, the qualitatively reported events were quantified both by the participating teachers in terms of valence as well as by external raters in terms of content. Therefore, the idiographic-nomothetic approach enabled us to give a comprehensive picture of individually relevant positive and negative events as experienced by beginning teachers.

In the present study, we addressed the following three research questions. First, we aimed to find out which professional tasks, such as giving lessons, preparing lessons and doing paperwork, or interacting with colleagues and principals, are most frequently considered as daily hassles or uplifts. Based on previous research (Chaplain, 2008; Goddard & Foster, 2001), we speculated that social interactions—also assessed on a daily basis—might be among the most frequent events. Additionally, due to a study by Philipp and Kunter (2013), which indicated that teachers spend a lot of time on preparation, we expected beginning teachers to mention many uplifts and hassles in this category. Moreover, we were interested in the ratio of hassles to uplifts. If it is true that beginning teachers suffer from high stress exposure, one would expect them to experience more hassles than uplifts.

Second, we investigated how beginning teachers' characteristics were related to daily hassles and uplifts. According to the model of Almeida (2005), certain personal characteristics such as gender, age, or personality traits are associated with the frequency and content of daily stressors. Therefore, we were interested in learning whether or not beginning teachers' work-related hassles and uplifts are associated with personality characteristics. Particularly, we wanted to know, whether the trait of neuroticism, which has been shown to be strongly related to the experience of stress and burnout (Alarcon, Eschleman, & Bowling, 2009; Swider & Zimmerman, 2010), is also associated with beginning teachers' difficulties at work. Moreover, we wanted to know whether work experience is also relevant for beginning teachers' hassles and uplifts. In accordance with Huberman (1989), we assumed that beginning teachers with more work experience might already be in the adaptation phase and might thus report more uplifts and fewer hassles than did beginning teachers in their first year.



Third, in accordance with Almeida (2005), we investigated the association between beginning teachers' daily hassles and uplifts and their daily stress symptoms in terms of emotional exhaustion. We assumed that the frequency of daily hassles is positively associated with daily emotional exhaustion. In contrast, the frequencies of daily uplifts were assumed to be negatively related to daily emotional exhaustion. We controlled for neuroticism at the person level, because among personality traits, neuroticism has consistently been shown to be most positively associated with emotional exhaustion (Alarcon et al., 2009; Swider & Zimmerman, 2010).

### 3. Method

#### 3.1. Sample

A total of 181 beginning teachers from Germany participated in our diary study. Participants who completed the diary on less than three out of 14 days were excluded from the analyses. As a consequence, 141 beginning teachers remained in the study. Teachers ( $n = 40$ ) not included in the analyses did not statistically significantly differ from teachers in the final sample ( $n = 141$ ) in terms of general emotional exhaustion and work experience, both of which were assessed in a pre-questionnaire. However, a statistically significant difference in gender distribution was observed, with a higher proportion of women in the final sample,  $\chi^2(1, N = 181) = 6.21, p = .02$ .

In Germany, teacher education consists of two consecutive phases. The first phase takes place at a university and focuses on academic training, comprising two subjects, as well as pedagogics, and ends with a first state examination. The second phase is an in-school induction program lasting between 18 and 24 months, followed by a second state examination. When both phases are successfully completed, teachers are then fully qualified to teach in a public or private school (for further information, see Lohmar & Eckhardt, 2013).

In our study, beginning teachers were all fully qualified to teach and had been working on a time scale ranging from less than one year up to four years after completing the second state examination ( $M = 2.43$  years,  $SD = 1.28$ ). Furthermore, 30.5% of the beginning teachers worked at an academic track school.<sup>1</sup> The mean age of the participating teachers was 32.02 years ( $SD = 4.96$ ) and 80.1% of the sample was female. Altogether, participants made 1605 diary entries and completed the diary in an average of 11.25 days ( $SD = 2.75$ ).

#### 3.2. Procedure

Beginning teachers were contacted via emails in which they received information about the study and an invitation to participate. Beginning teachers who had graduated in the German federal state of Schleswig-Holstein within the last four years were contacted. If they agreed to participate in our study, they received individual codes to access the online diary. Participants were reimbursed with different sums of money depending on the frequency of their participation.

Several demographic, personal, and work-related variables were assessed via an online pre-questionnaire at the beginning of the study. Afterwards, the teachers were requested to complete an online diary on 14 consecutive days in May 2011 which was in the second half of the school year. By choosing May for our data assessment we avoided the beginning and the end of the school year as

well as the holidays at Christmas and Easter. Therefore, we assume that we observed the daily experiences and well-being of beginning teachers on average school days, which in turn allows us to generalize our findings (Kinnunen & Leskinen, 1989). Participants could work on the diary in the evening of each day between 6:00 p.m. and 12:00 a.m. It was not possible to provide information about a particular day after that day; this was to ensure that participants' entries were fresh. In the diary, beginning teachers provided information about positive and negative events and about their well-being. As diaries can constitute a burden on the participants and require high commitment (Zirkel, Garcia, & Murphy, 2015), diary studies usually last between a few days and two weeks (e.g., Malmberg et al., 2014; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009; see also Ohly, Sonnentag, Niessen, & Zapf, 2010). Assessing teachers' experiences and well-being over 14 days allowed us to reveal possible recurring patterns across the two weeks.

#### 3.3. Measures

##### 3.3.1. Daily assessments

**3.3.1.1. Daily uplifts and hassles.** To assess daily uplifts and hassles, we used an idiographic-nomothetic approach (Emmons, 1986). On every evening of the 14 days of the study, participants were asked to document their experiences at work ("Please write down the positive and negative events that you experienced at work today!"); see Appendix A for the complete instructions). Participants could report up to ten daily events in an open answer format (idiographic). The answers reported in the open answer format were rated by the participants themselves, i.e., whether it was experienced as positive, negative, or neutral, on a 5-point scale (1 = very negative, 2 = negative, 3 = neutral, 4 = positive, 5 = very positive) and afterwards, every event was categorized by trained raters into one of eight categories (nomothetic). We defined an event as an uplift when it was rated either as positive (= 4) or very positive (= 5) and as a hassle when it was rated either as negative (= 2) or very negative (= 1).

Regarding the content of the open answers, all events were coded by two trained research assistants according to a category system that comprised eight categories and should cover the main professional tasks of teachers (see Table 1 for an overview of the categories and examples of reported events). It was necessary to develop a category system because there was no existing taxonomy for uplifts and hassles of (beginning) teachers. On the one hand, our category system was based on the standards for the education of teachers decided by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany – KMK (KMK, 2004). The standards for the education of teachers identify the main professional tasks of teachers (e.g., lesson planning, teaching methods, or planning and implementation of school projects). On the other hand, we pursued an inductive approach because we wanted as many events as possible to fit into one of the categories. Therefore, we summarized the professional tasks defined by the KMK (2004) in superordinate categories to develop a feasible category system that enables us to classify detailed as well as imprecise answers.

First, the category "instruction in class" included all events describing situations that occurred in the classroom, such as classroom management issues, interaction with students in class, or issues with students' motivation. Second, events belonging to preparation, follow-up processing, and evaluation of students' performance were classified into the category "preparation." Third, interactions with students that took place outside the classroom, for example during break-time, were summarized into the category "interacting with students outside class." Fourth, the category "counseling" included events dealing with aspects of counseling

<sup>1</sup> In the present study, we differentiate between academic track schools (Gymnasium) and all other school tracks.

**Table 1**  
Categorization and total frequencies.

Categories	Valence	Examples	Mean valence rating	Frequencies
Instruction in class	Positive	"Successful group work in the German lesson"	4.45	1200
	Negative	"A noisy class"	1.69	661
Preparation	Positive	"All tests corrected"	4.34	229
	Negative	"I avoided doing the corrections"	1.78	118
Interacting with students outside class	Positive	"Small talk with the students of the 13th class about their plans for the future after finishing school"	4.41	114
	Negative	"I visited the library with my class, it was exhausting"	1.92	20
Counseling	Positive	"Friendly conversation with parents after classes"	4.36	79
	Negative	"Exhausting conversation with parents"	1.53	64
Interacting with colleagues	Positive	"The collaboration with colleagues went well"	4.41	613
	Negative	"Conflict with a colleague"	1.62	281
Professional development	Positive	"Great further education"	4.50	21
	Negative	"Meaningless further education"	1.50	7
Organization	Positive	"Unexpected free lessons"	4.41	255
	Negative	"Rare breaks"	1.75	269
Other	Positive	"The food in the school canteen tastes good"	4.56	137
	Negative	"Ministry can't grant any professional perspective"	1.54	149

Note.  $N = 141$ . Valence ratings were made on a 5-point scale where 1 = very negative, 2 = negative, 3 = neutral, 4 = positive, and 5 = very positive. The mean ratings were calculated by averaging across all positive (rated as 4 or 5) or all negative (rated as 1 or 2) events. Frequencies were calculated by summing the occurrence of an event across days and persons.

either parents or students. Fifth, we summarized all events describing social situations with colleagues and principals into the category "interacting with colleagues." Sixth, events relating to further development were categorized into "professional development." Seventh, the category "organization" included events concerning different aspects of school and work organization. Eighth, all events that could not be coded into one of the seven categories and events concerning teachers' future and their health fell into the category "other." The agreement of the two independent raters was satisfactory (Cohen's kappa  $\kappa = .82$ ).

For the third research question, we reduced the number of categories for the multilevel analyses to four main categories. The categories "instruction in class" and "interacting with colleagues" were the most frequent and were therefore included. Additionally, we included "preparation," which is assumed to be the most time-consuming activity aside from teaching (Philipp & Kunter, 2013). The remaining categories were summarized into the category "other."

**3.3.1.2. Daily emotional exhaustion.** Every day, participants completed four items representing emotional exhaustion, following a German version (Enzmann & Kleiber, 1989) of the Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996). Items (e.g., "I felt exhausted at my work today") were administered on a 4-point response scale (ranging from 1 = *strongly disagree* to 4 = *strongly agree*) and explicitly focused on the particular day. Following Bolger and Laurenceau (2013), we used multilevel confirmatory factor analysis (CFA) to calculate the reliability of the 4-item scale for the assessment of changes within participants. The reliability of the scale was satisfactory ( $\omega = .79$ ), indicating that within-person changes in daily emotional exhaustion can be reliably measured by our instrument. Additionally, fit indices indicated a good fit of the multilevel CFA ( $\chi^2(4) = 19.40$ ,  $p < .001$ ;  $RMSEA = .053$ ;  $CFI = .982$ ).

**3.3.1.3. Number of classes taught.** Number of classes taught was assessed by asking the teachers in an open format "How many classes did you teach today?" The number of classes taught varied between 0 and 7 classes ( $M = 2.36$ ,  $SD = 1.69$ ).

**3.3.1.4. Weekend.** To consider potential weekend effects we created a dummy coded variable (0 = not weekend, 1 = weekend).

### 3.3.2. Trait-like measures from pre-questionnaire

**3.3.2.1. Neuroticism.** Neuroticism was measured as part of the pre-questionnaire with a 12-item scale following Borkenau and Ostendorf (1991). Items (e.g., "I often feel tense and nervous.") were measured on a 4-point scale (ranging from 1 = *strongly disagree* to 4 = *strongly agree*) with a high reliability ( $\alpha = .82$ ).

**3.3.2.2. Final grade in teacher education.** Teachers' final grade from their teacher training degree was computed as a mean of two grades for (a) the first state-examination or the Master of Education, and (b) the second state-examination or the grade for the induction phase. Grades were reported in accordance with the German school grade system (ranging from 1 = *very good* to 6 = *insufficient*).

**3.3.2.3. Work experience.** Work experience indicated how many years participants had been working in the teaching profession since graduation ("When did you start to work as a teacher?").

### 3.4. Statistical analyses

We used multilevel regression analyses to predict daily emotional exhaustion as a within-person variable. Using a diary approach, days (within-person level or level 1) were nested within participants (between-person level or level 2). Multilevel models are recommended for analyzing these nested data and are frequently used to explain day-to-day variation in diary studies (Raudenbush & Bryk, 2002; see also Bolger & Laurenceau, 2013).

We specified a series of multilevel models, with daily emotional exhaustion as the dependent variable and predictor variables at level 1 (within-person) and level 2 (between-person). By systematically adding sets of variables to the model, we were able to detect any change in the predictive power of variables when including additional variables. Similar to the measure of explained variance in traditional regression models, we calculated the proportions reduction in variance (PRV; Peugh, 2010; Raudenbush & Bryk, 2002) at level 1 and level 2 as a measure of effect size. This measure is determined by calculating the difference between the variance of the baseline model and of the model including predictors, divided by the variance of the baseline model.

For the sake of interpretability, emotional exhaustion, neuroticism, and the control variables 'work experience' and 'final grade' were standardized ( $M = 0$ ,  $SD = 1$ ) prior to multilevel modeling.

**Table 2**

Descriptive statistics and correlations of the variables on person and day level.

		<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
<b>Person level</b>																		
1	Gender	0.81	0.39	1														
2	Neuroticism	1.84	0.45	<b>.08</b>	1													
3	Uplifts (mean)	1.34	0.67	.02	.01	1												
4	Hassles (mean)	0.79	0.49	.02	<b>.20</b>	<b>.36</b>	1											
<b>Day level</b>																		
5	Number of classes taught	2.36	1.69					1										
6	Weekend	0.29	0.45					<b>-.50</b>	1									
7	Emotional exhaustion (prev. day)	1.58	0.62					.03	<b>-.13</b>	1								
<b>Uplifts</b>																		
8	Instruction in class	0.61	0.94					<b>.34</b>	<b>-.43</b>	<b>.07</b>	1							
9	Preparation	0.12	0.37					-.03	<b>.05</b>	.01	.00	1						
10	Interacting with colleagues	0.31	0.64					<b>.15</b>	<b>-.32</b>	.01	<b>.27</b>	.04	1					
11	Other	0.31	0.61					.04	<b>-.23</b>	-.01	<b>.15</b>	.00	<b>.15</b>	1				
<b>Hassles</b>																		
12	Instruction in class	0.33	0.67					<b>.26</b>	<b>-.32</b>	.02	<b>.28</b>	-.01	<b>.21</b>	<b>.13</b>	1			
13	Preparation	0.06	0.27					-.04	<b>.07</b>	<b>.06</b>	-.01	.03	.01	.01	-.02	1		
14	Interacting with colleagues	0.14	0.43					<b>.10</b>	<b>-.21</b>	<b>.06</b>	<b>.15</b>	-.00	<b>.12</b>	<b>.08</b>	<b>.09</b>	.01	1	
15	Other	0.26	0.58					<b>.18</b>	<b>-.24</b>	<b>.09</b>	<b>.20</b>	.00	<b>.16</b>	<b>.12</b>	<b>.16</b>	.03	<b>.11</b>	1

Note. Gender: 0 = male, 1 = female; Weekend: 0 = no, 1 = yes; Uplifts and hassles are stated in absolute frequencies; Kendall's tau correlation; statistically significant correlations ( $p < .05$ ) are in bold.

Dichotomous variables remained in their original metric. At level 1, the frequencies of daily uplifts and hassles as well as the number of classes taught were centered at the person's own mean scores across days (person-mean centering; see Bolger & Laurenceau, 2013). At level 2, the aggregated means of uplifts and hassles were grand mean centered. As we had no specific hypotheses about varying slopes, all calculated multilevel models were random intercept models and it was assumed that the slopes did not vary across persons. All multilevel models were estimated by maximum likelihood using the software *Mplus 7* (Muthén & Muthén, 1998–2012).

## 4. Results

### 4.1. Preliminary analysis

Over 14 days, beginning teachers reported a total of 4762 events, 2648 (55.6%) of which were rated by the participants as either positive or very positive; and which were thus labeled as daily uplifts. 1569 (33.0%) events were rated as either negative or very negative events and were thus labeled as hassles. 545 events (11.4%) were rated by the participants as neutral. For further analyses, we only focused on daily uplifts (positive events) and hassles (negative events) and did not consider neutral events. Table 2 gives a summary of the descriptive statistics and non-parametric Kendall's tau correlations ( $\tau$ ) of the variables. At the person level, the frequency of hassles was positively associated with the frequency of reported uplifts ( $\tau = .36$ ). Beginning teachers who, on average, reported more daily hassles also reported more uplifts during the time of our study. The frequency of hassles reported was also positively associated with the personality trait neuroticism ( $\tau = .20$ ). At the day level, almost all uplifts and hassles – except for preparation – had statistically significant positive correlations, ranging from  $\tau = .08$  to  $\tau = .28$ . Additionally, on weekends, beginning teachers reported less uplifts and hassles ( $\tau = -.43$  to  $-.21$ ), except for uplifts and hassles regarding preparation (uplifts:  $\tau = .05$ ; hassles:  $\tau = .07$ ). Moreover, the more classes were taught per day, the more hassles and uplifts were reported (ranging from  $\tau = .10$  to  $\tau = .34$ ) except for the category of preparation.

### 4.2. Frequencies of daily uplifts and hassles of beginning teachers

In our first research question, we wanted to find out the fields of activity for which beginning teachers report the most daily uplifts and hassles. We put the total number of hassles and uplifts of each category in relation to the number of participated days in order to improve interpretability. These relative frequencies showed that participants reported 1.71 uplifts ( $SD = 0.81$ ) and 1.01 hassles ( $SD = 0.61$ ) on average per day participated.<sup>2</sup> Fig. 1 illustrates the means of the relative frequencies of the uplifts and hassles in each category. The most frequent events reported were for the category dealing with “instruction in class”. This was true for both uplifts ( $M = 0.78$ ,  $SD = 0.47$ ) and hassles ( $M = 0.42$ ,  $SD = 0.32$ ). To put it differently, 46% of all positive events and 42% of all negative events dealt with classroom-related topics. The second most frequent category dealt with “interacting with colleagues.” Beginning teachers reported an average of  $M = 0.40$  ( $SD = 0.33$ ) uplifts and  $M = 0.19$  ( $SD = 0.19$ ) hassles per day (23% of all positive and 19% of all negative events). The third most frequent category was “organization” with almost as many hassles ( $M = 0.17$ ,  $SD = 0.18$ ; 17%) as uplifts ( $M = 0.16$ ,  $SD = 0.16$ ; 9%). Beginning teachers reported few uplifts ( $M = 0.15$ ,  $SD = 0.17$ ) and hassles ( $M = 0.07$ ,  $SD = 0.11$ ) during “preparation.” In other words, only 7% of all hassles and 9% of all uplifts were related to preparation. The other three content categories contained a rather small number of events (all under 5% of uplifts and hassles). Thus, very few uplifts ( $M = 0.07$ ,  $SD = 0.11$ ) and hassles ( $M = 0.01$ ,  $SD = 0.04$ ) referred to “interacting with students outside class.” Similarly, the category “counseling” contained only very few uplifts ( $M = 0.05$ ,  $SD = 0.08$ ) and hassles ( $M = 0.04$ ,  $SD = 0.09$ ). The lowest number of reported uplifts ( $M = 0.01$ ,  $SD = 0.04$ ) and hassles ( $M = 0.00$ ,  $SD = 0.02$ ) was in the category of “professional development.” The category “other” also included only few uplifts ( $M = 0.09$ ,  $SD = 0.11$ ) and hassles ( $M = 0.10$ ,  $SD = 0.13$ ).

<sup>2</sup> We also investigated the proportion of variance on the person and day level by calculating intraclass correlation coefficients (ICC) which showed that about 13% of the variance in the number of daily uplifts ( $ICC_{\text{uplifts}} = .130$ ;  $SD_{\text{within}} = 0.303$ ,  $SD_{\text{between}} = 2.022$ ) and 13% of the variance in daily hassles ( $ICC_{\text{hassles}} = .127$ ;  $SD_{\text{within}} = 0.158$ ,  $SD_{\text{between}} = 1.091$ ) was located between persons.

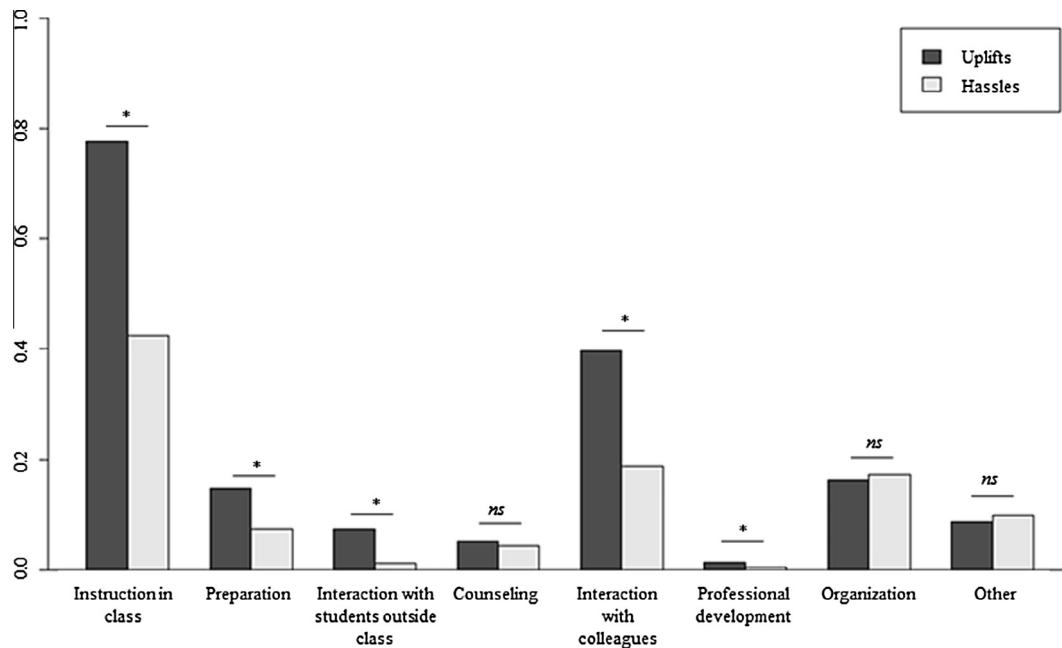


Fig. 1. Relative frequencies of daily uplifts and hassles (\* $p < .05$ , ns = not statistically significant).

Overall, in almost all categories, beginning teachers reported more uplifts than hassles. In five out of eight categories, these differences were statistically significant. Because daily uplifts and hassles were non-normally distributed (skewness ranged from 1.02 to 5.34 and kurtosis from 0.62 to 30.28) we calculated Wilcoxon signed-rank tests. Beginning teachers reported more uplifts than hassles in the categories “instruction in class” ( $z = -8.15$ ,  $p < .001$ ), “interacting with colleagues” ( $z = -6.44$ ,  $p < .001$ ), “preparation” ( $z = -4.67$ ,  $p < .001$ ), “interacting with students outside class” ( $z = -6.36$ ,  $p < .001$ ), and “professional development” ( $z = -2.83$ ,  $p = .01$ ). Differences between uplifts and hassles in the categories “organization” ( $z = -0.85$ ,  $p = .40$ ), “counseling” ( $z = -1.19$ ,  $p = .23$ ), and “other” ( $z = -0.78$ ,  $p = .45$ ) were not statistically significant.

We further differentiated the category “instruction in class” to understand this broad category in more detail. Guided by the CLASS framework (Pianta & Hamre, 2009) we further distinguished between three aspects: classroom organization (e.g., classroom management, teaching methods), emotional support (e.g., teacher-student interaction), and instructional support (e.g., students’ learning progress and motivation). Comparing frequencies of events in class, beginning teachers reported fewer uplifts ( $M = 0.18$ ,  $SD = 0.22$ ) than hassles ( $M = 0.22$ ,  $SD = 0.21$ ) concerning “classroom organization” ( $z = -2.85$ ,  $p = .004$ ), more uplifts ( $M = 0.21$ ,  $SD = 0.19$ ) than hassles ( $M = 0.09$ ,  $SD = 0.11$ ) in the category of “emotional support” ( $z = -6.33$ ,  $p < .001$ ), and also more uplifts ( $M = 0.39$ ,  $SD = 0.31$ ) than hassles ( $M = 0.11$ ,  $SD = 0.13$ ) in “instructional support” ( $z = -8.74$ ,  $p < .001$ ).

#### 4.3. Associations of daily uplifts and hassles with teacher characteristics

Our second research question addressed the associations between teacher characteristics and the aggregated daily uplifts and hassles. In Table 3, correlations between the aggregated number of daily hassles and uplifts and teachers’ gender, neuroticism, final grade, school track, and work experience are reported. Overall, no significant correlations were found between the average number of uplifts and teacher characteristics. In contrast, the num-

ber of daily hassles was significantly related to teachers’ neuroticism ( $\tau = .19$ ), indicating that teachers higher on neuroticism also reported more daily hassles over the course of the diary study. Additionally, work experience was negatively associated with number of hassles in “professional development” ( $\tau = -.17$ ) and in “organization” ( $\tau = -.13$ ). Unexpectedly, there were no further statistically significant correlations between work experience and the number of daily uplifts and hassles. The further characteristics of beginning teachers had a few associations with some daily uplifts and hassles, ranging from  $\tau = -.17$  to .20. For example, women reported more uplifts regarding “instruction in class” than men ( $\tau = .14$ ), and teachers higher on neuroticism reported more hassles regarding “instruction in class” ( $\tau = .13$ ).

#### 4.4. Daily uplifts and hassles predicting daily emotional exhaustion

Our third research question asked whether the daily uplifts and hassles of beginning teachers could explain daily emotional exhaustion. Therefore, within the multilevel regression analyses, we used daily emotional exhaustion as the dependent variable.

First, we specified a baseline model with no predictors at level 1 and level 2 (also known as empty or null model; Raudenbush & Bryk, 2002). The baseline model partitions the variance of daily emotional exhaustion between the two levels. Of the total variance, 73.9% was located at the within-person level (level 1) and 25.5% at the between-person level (level 2). This was consistent with the intraclass correlation coefficient (ICC) that was .256 ( $SD_{\text{within}} = 0.101$ ,  $SD_{\text{between}} = 0.294$ ). This relatively small proportion of variance at the person-level indicates a strong variation of emotional exhaustion across days.

In the next step, we specified three models, with daily variables included at level 1 and personal variables at level 2. In all models, teachers’ final grade, school track, and work experience were included as control variables on level 2. Additionally, we included the emotional exhaustion of the previous day on level 1 in order to control for the prior day’s (i.e., lagged) emotional exhaustion when estimating the effect of daily variables on emotional exhaustion (see Bolger & Laurenceau, 2013). Table 4 reports the results of the multilevel analyses.



**Table 3**

Correlations between teacher characteristics and daily uplifts and hassles.

	Gender	Neuroticism	Final grade	School track	Work experience
<b>Uplifts (overall)</b>	.06	–.02	.07	.07	–.05
Instruction in class	<b>.14</b>	.03	<b>.12</b>	.02	–.07
Preparation	–.07	.08	–.06	.10	–.03
Interacting with students outside class	.05	–.06	.01	.09	–.03
Counseling	.14	.02	<b>.13</b>	–.04	.05
Interacting with colleagues	–.01	–.09	–.01	.10	–.04
Professional development	–.11	.01	.06	–.04	.06
Organization	–.01	–.04	.05	.06	.02
Other	.03	–.04	–.06	–.08	–.11
<b>Hassles (overall)</b>	.03	<b>.19</b>	–.04	–.01	–.06
Instruction in class	.06	<b>.13</b>	–.01	.02	–.07
Preparation	–.02	.03	.01	<b>.20</b>	.07
Interacting with students outside class	.05	–.03	.12	.02	.07
Counseling	.09	.05	–.11	<b>–.17</b>	.11
Interacting with colleagues	.07	.10	–.02	–.10	–.04
Professional development	.01	.10	–.08	.01	<b>–.17</b>
Organization	–.08	.07	–.01	–.03	<b>–.13</b>
Other	–.03	.01	–.03	–.02	–.01

Note. Gender: 0 = male, 1 = female; School track: 0 = not academic track, 1 = academic track; Uplifts and hassles are stated in relative frequencies; Kendall's tau correlation; statistically significant correlations ( $p < .05$ ) are in bold.

**Table 4**

Predicting beginning teachers' emotional exhaustion through person- and day-level variables: Results from multilevel analyses.

	Model 1		Model 2		Model 3	
	<i>B</i> (SE)	<i>CI</i> <sub>95</sub>	<i>B</i> (SE)	<i>CI</i> <sub>95</sub>	<i>B</i> (SE)	<i>CI</i> <sub>95</sub>
Intercept	0.03 (0.10)	[–0.16; 0.23]	0.04 (0.10)	[–0.16; 0.23]	0.01 (0.10)	[–0.18; 0.20]
<b>Person level</b>						
Gender	–0.09 (0.10)	[–0.29; 0.11]	–0.08 (0.10)	[–0.34; 0.12]	–0.07 (0.10)	[–0.26; 0.13]
Neuroticism	<b>0.30</b> (0.04)	[0.22; 0.38]	<b>0.30</b> (0.04)	[0.19; 0.38]	<b>0.27</b> (0.04)	[0.19; 0.34]
Uplifts (mean)			–0.06 (0.06)	[–0.22; 0.06]	–0.14 (0.07)	[–0.29; 0.00]
Hassles (mean)					<b>0.26</b> (0.09)	[0.08; 0.44]
<b>Day level</b>						
Emotional exhaustion (previous day)	<b>0.13</b> (0.05)	[0.03; 0.23]	<b>0.13</b> (0.05)	[0.03; 0.22]	<b>0.11</b> (0.04)	[0.02; 0.19]
Weekend	0.19 (0.15)	[–0.09; 0.48]	–0.03 (0.16)	[–0.34; 0.29]	0.18 (0.15)	[–0.12; 0.48]
Number of classes taught	<b>0.08</b> (0.03)	[0.04; 0.13]	<b>0.11</b> (0.02)	[0.06; 0.16]	<b>0.07</b> (0.02)	[0.03; 0.11]
Uplifts						
Instruction in class			– <b>0.24</b> (0.04)	[–0.31; –0.16]	– <b>0.16</b> (0.04)	[–0.23; –0.09]
Preparation			– <b>0.19</b> (0.07)	[–0.32; –0.05]	–0.11 (0.07)	[–0.24; 0.01]
Interacting with colleagues			– <b>0.13</b> (0.04)	[–0.21; –0.06]	– <b>0.09</b> (0.04)	[–0.16; –0.02]
Other			– <b>0.20</b> (0.05)	[–0.29; –0.11]	– <b>0.15</b> (0.04)	[–0.23; –0.06]
Hassles						
Instruction in class					<b>0.22</b> (0.04)	[0.14; 0.31]
Preparation					<b>0.48</b> (0.15)	[0.19; 0.77]
Interacting with colleagues					<b>0.21</b> (0.06)	[0.09; 0.33]
Other					<b>0.24</b> (0.05)	[0.15; 0.33]
Explained variance (day level)	4.5%		11.6%		19.6%	
Explained variance (person level)	59.6%		58.0%		56.1%	

Note. Gender: 0 = male, 1 = female; Weekend: 0 = no, 1 = yes; Emotional exhaustion and neuroticism were standardized ( $M = 0$ ,  $SD = 1$ ); Controlled for final grade, school track, and work experience; Statistically significant coefficients ( $p < .05$ ) are in bold. [Further multilevel models including time as a level-1 predictor (a) as a linear trend over the 14 days, (b) as weekly intervals, or (c) with every school day and weekend did not reveal an effect of time on emotional exhaustion. Furthermore, including time did not change the association of the variables of interest with emotional exhaustion.]

In Model 1, we included the emotional exhaustion of the previous day, whether a particular day was a working day or a weekend day, and the number of classes taught on level 1. The emotional exhaustion of the previous day ( $B = 0.13$ ,  $p = .02$ ) predicted daily emotional exhaustion, indicating that higher emotional exhaustion on the previous day is associated with higher emotional exhaustion at the next evening. However, whether a particular day was a weekend or working day was not related to emotional exhaustion ( $B = 0.19$ ,  $p = .18$ ). In contrast, the number of classes taught ( $B = 0.08$ ,  $p < .001$ ) on a certain day had a statistically significant positive association with daily emotional exhaustion. In Model 1,

4.5% of the variance in daily emotional exhaustion was explained on level 1. On level 2, we found that beginning teachers with higher neuroticism ( $B = 0.30$ ,  $p < .001$ ) also reported a higher level of emotional exhaustion across the two weeks.

In Model 2, the frequencies of daily uplifts were additionally included on level 1 in order to predict daily emotional exhaustion. Uplifts in the categories “instruction in class” ( $B = -0.24$ ,  $p < .001$ ), “preparation” ( $B = -0.19$ ,  $p = .01$ ), “interacting with colleagues” ( $B = -0.13$ ,  $p < .001$ ), and “other” ( $B = -0.20$ ,  $p < .001$ ) had a statistically significant negative association with daily emotional exhaustion, indicating that beginning teachers reported a lower



level of emotional exhaustion on days when they mentioned more uplifts in one of the categories than on their individual average of days. The effect of the other predictor variables on daily emotional exhaustion remained stable. Model 2 was able to explain 11.6% of the variance at level 1, which is an increase of 7.1% compared to Model 1. On level 2, we included the average of daily uplifts that had no association with emotional exhaustion ( $B = -0.06$ ,  $p = .32$ ).

In Model 3, we added the daily hassles of beginning teachers at level 1. Daily hassles in the categories “instruction in class” ( $B = 0.22$ ,  $p < .001$ ), “preparation” ( $B = 0.48$ ,  $p < .001$ ), “interacting with colleagues” ( $B = 0.21$ ,  $p < .001$ ), and “other” ( $B = 0.24$ ,  $p < .001$ ) statistically significantly predicted daily emotional exhaustion: On days for which beginning teachers reported more hassles in one of these categories than for their individual average of days, emotional exhaustion was higher. The coefficients for the uplifts “instruction in class,” “interacting with colleagues,” and “other” remained statistically significant. In contrast, uplifts during “preparation” did not remain statistically significant ( $B = -0.11$ ,  $p = .08$ ). The amount of explained variance at level 1 reached 19.6%, which is an increase of 8.0% compared to Model 2. On level 2, we added the average of daily hassles to the model. We found a positive association between the average of daily hassles and emotional exhaustion ( $B = 0.26$ ,  $p = .01$ ).

## 5. Discussion

The purpose of this study was to examine the daily uplifts and hassles of beginning teachers and their effect on emotional exhaustion. Analyses showed that most of the uplifts and hassles of beginning teachers were related to “instruction in class,” “interacting with colleagues,” and “organization.” Surprisingly, there were only a few associations between daily uplifts and hassles and beginning teachers’ characteristics. Moreover, results demonstrate that daily uplifts were negatively and hassles positively associated with emotional exhaustion even when the number of classes taught, week-end effects, and the emotional exhaustion of the previous day were controlled for.

### 5.1. Beginning teachers’ daily experiences

The initial aim of the current study was to identify daily uplifts and hassles in order to reveal which professional task might be experienced as most stressful. With regard to the first research question, our analyses showed that the majority of uplifts and hassles belong to the category of “instruction in class,” followed by “interacting with colleagues,” and “organization.” Just a few events were reported in the categories “preparation” and “professional development”.

First, as expected, results indicate that beginning teachers experience many daily uplifts and hassles within social situations, such as instruction in class or interacting with colleagues. Results confirm previous findings revealing interactions with students and colleagues as important resources and stressors of beginning teachers (Chaplain, 2008; Uusiautti et al., 2014; Veenman, 1984). Second, however, it was surprising that just a few uplifts and hassles were related to preparation and follow-up processing, although, following Philipp and Kunter (2013), teachers spend most of their time outside the classroom on these activities. One explanation might be that these activities are time-consuming but are not as emotionally relevant as social interactions and, thus, time spent on preparation was not mirrored in a corresponding number of daily uplifts and hassles.

Importantly, beginning teachers reported far more uplifts than hassles. This result is surprising because, in prior research, the

transition to the teaching profession has been described as highly stressful (e.g., Fives et al., 2007) and as a reality shock (Goddard et al., 2006; Veenman, 1984). Our results point more in the direction of Huberman’s model (1989), which describes the first stage in the teaching profession as both demanding and filled with positive experience. Beginning teachers reported several positive experiences while teaching and interacting with other teacher colleagues. Overall, results showed that beginning teachers reported more uplifts than hassles questioning the reality shock.

### 5.2. Beginning teachers’ characteristics and daily experiences

The second research question asked how beginning teachers’ characteristics are associated with daily uplifts and hassles. Contrary to our expectations, we found only few associations between teachers’ characteristics and the frequency of uplifts and hassles within two weeks. Surprisingly, beginning teachers’ work experience was solely related negatively to hassles in “professional development” and in “organization” but was not related to the frequency of daily uplifts and hassles reported by the teachers in the other categories. We expected that there would have been an increase in positive and a decrease in negative experiences due to the adapting and learning processes of the beginning teachers. Despite the assumption of Lavigne (2014), who suggested that the phase of being a ‘beginning’ teacher might last up to five years, it could be that the main adaption process is almost finished at this point in the teaching career and that it already took place in the two years of the induction program. It would be interesting to compare patterns of uplifts and hassles between teachers starting the induction phase, who have very little practical experience.

### 5.3. Beginning teachers’ uplifts and hassles and emotional exhaustion

The third research question of the current study was to investigate the relationship between daily uplifts and hassles, and emotional exhaustion. Consistent with our expectations, our analyses showed that uplifts were negatively and hassles were positively associated with emotional exhaustion. Additionally, we found that neuroticism and the aggregated mean of daily hassles were positively related to emotional exhaustion.

Our results indicate that uplifts were protective and hassles were risk factors for the emotional exhaustion of beginning teachers. This is consistent with Almeida’s findings (2005) that individuals were more likely to report lower levels of well-being on days when they reported more daily hassles. As expected, hassles regarding “preparation” were positively associated with emotional exhaustion. On the one hand, this was not surprising because workload is already known as a major stressor among beginning teachers (Kyriacou & Kunc, 2007; Uusiautti et al., 2014). On the other hand, participating teachers did not mention hassles concerning “preparation” frequently. Although they were reported only rarely, hassles during “preparation” were associated with emotional exhaustion. The same applies to uplifts and hassles from “interacting with colleagues,” which were less likely than uplifts and hassles from “instruction in class,” but also had a major impact on beginning teachers’ well-being. The positive and negative association of uplifts and hassles regarding “instruction in class” with emotional exhaustion was as expected. As we have seen above, participating teachers mentioned many uplifts and hassles in this category, with far more uplifts than hassles. Taken together, on the daily level, hassles were positively associated with emotional exhaustion and uplifts negatively.

The central question to us is why the results of the current study are as positive as they are. We have three possible explanations: First, maybe the induction program in Germany provides a smooth transition into the teaching profession. Teachers in the

induction program were introduced by mentors and gradually assumed responsibilities in teaching. Therefore, teachers in Germany might not suffer a reality shock. Second, in contrast to many other studies that focused on negative aspects or negative experiences of student and beginning teachers (e.g., Veenman, 1984) we considered not only negative but also positive experiences of teachers. Therefore, the current study showed a more positive picture of teachers' professional life by shifting the focus from the negative to all relevant experiences. Third, we used a diary approach to assess daily uplifts and hassles as well as daily emotional exhaustion. While most previous research assessed positive and/or negative experiences as relatively stable traits, we considered these experiences as state variables. There is evidence that differences in characteristics can be attributed to the assessment of the characteristic as state or trait variable. For example Goetz, Bieg, Lüdtke, Pekrun, and Hall (2013) showed that girls' anxiety in mathematics was lower when using a daily assessment (state) than when assessing it as stable characteristic (trait).

#### 5.4. Limitations and future research

Some limitations should be considered. First, we did not know much about the quantities of beginning teachers' daily experiences, such as hours spent on particular tasks, because we focused on the content of daily uplifts and hassles reported in the evening. Additionally, we did not know anything about the actual behavior of teachers because we used self-report data. Second, it must be taken into account that the task of keeping a diary for 14 consecutive days might have an influence on what uplifts and hassles beginning teachers reported and how emotionally exhausted they felt. As reported by Clarkson and Hodgkinson (2007), keeping a diary might be highly beneficial for participants and might therefore have intervening effects. Third, although we included the emotional exhaustion of the previous day as a control variable in our multilevel models, we cannot completely rule out the existence of unobserved third variables that influence the occurrence of daily events as well as teachers' emotional exhaustion. Therefore, the relations between daily uplifts respectively hassles and daily emotional exhaustion should not be interpreted as evidence for causal effects.

Despite these limitations, we believe that our study enabled us to gain important insights that could be fruitfully applied in further research. First, one main finding was that beginning teachers reported relatively low daily stress exposure and low daily emotional exhaustion. This stands in marked contrast to the widespread claim that teachers typically experience high levels of stress (Chaplain, 2008; Gavish & Friedman, 2010). As our study is one of the first to investigate daily experiences and daily emotional exhaustion, one important issue for future research could be to replicate our results, and to expand research to teachers who have more or less experience in teaching and to countries with different teacher education systems. It seems crucial to investigate whether the current findings can be extended to teachers who have more or less work experience than the beginning teachers in the current study. On the one hand, this might be preservice teachers who are part of an induction program and, therefore, might differ from beginning teachers in their daily experiences and well-being. The transition from university to teaching takes place during the induction phase and preservice teachers possibly suffer from a reality shock in this phase. Therefore, future research might investigate whether preservice and beginning teachers differ in their daily experiences and well-being in order to find out whether and, if so, when teachers experience a reality shock and how it might be reflected in their daily experiences and well-being. On the other hand, differences might be found when investigating the daily experiences and well-being of teachers who have worked in their

profession for many years. They have gained a lot of experience and, therefore, might be not affected by daily experiences to the same extent as beginning teachers. However, they might also show less engagement and a withdrawal from their work (Huberman, 1989). Moreover, as shown by Scheuch, Haufe, and Seibt (2015), mental and psychosomatic illnesses are the main reasons for early retirement among German teachers. Therefore, it would be interesting to know whether teachers at the end of their career also report differently on their daily experiences and well-being than beginning teachers. Furthermore, from a cross-cultural perspective, it would be very interesting to examine how different systems of teacher education have an influence on beginning teachers' daily working life and well-being. We know that countries differ greatly in teacher education and in the way in which the transition from university training to practical training is organized. Not every country offers an induction program and, where induction programs exist, there is great variation in the extent of these programs (OECD, 2005). Previous research has revealed that induction programs have a positive impact on teachers, such as a reduced likelihood to leave the profession (Ingersoll, 2012; Smith & Ingersoll, 2004). Therefore, it might be interesting to know whether such positive effects can also be found in teachers' daily experiences and well-being.

Second, our study showed that not all days are the same in the teaching profession as there was a high variability in the daily uplifts, hassles, and daily emotional exhaustion over the 14 days. Therefore, another important issue for future research could be to examine the importance of teachers' daily well-being for instructional quality and students' outcomes. Based on the results of previous studies that revealed an effect of emotional exhaustion on students' perceived teacher autonomy support and students' achievement (Klusmann, Richter, & Lüdtke, 2016; Shen et al., 2015), it would be interesting to know how daily variations in emotional exhaustion are reflected in teachers' performance at school, especially while teaching, and how this might affect students. Previous research using daily measures showed, first, that teachers' emotional exhaustion is related to the emotions that teachers experience in the classroom (Keller, Chang, Becker, Goetz, & Frenzel, 2014) and that these are, in turn, related to students' emotions (Becker, Goetz, Morger, & Ranellucci, 2014) and, second, that the characteristics of teaching (supportive presentation style and excessive lesson demands) are associated with the academic emotions of students, such as enjoyment, pride, or boredom (Goetz, Lüdtke, et al., 2013). An investigation of the association between teachers' daily emotional exhaustion and instructional quality would be an interesting topic for future research. Moreover, future research could address the question of whether daily fluctuations in emotional exhaustion (state) and teachers' trait-reported emotional exhaustion differ in their importance for instructional quality and for the academic emotions of students.

#### 5.5. Theoretical and practical implications

Our results correspond with the models described by Almeida (2005) as well as Almeida and Wong (2009) in that way that daily stress exposure namely the frequency of uplifts and hassles were related to teachers' daily well-being. Interestingly, the particular content of uplifts and hassles did not demonstrate differential effects on well-being. It was rather the frequency and the subjective valence for teachers (if an event was positive or negative) that caused differences in teachers' emotional exhaustion. That means that, for example, classroom disturbances are not more strongly related to teachers' emotional exhaustion than struggling with preparation or paper work. However, overall, beginning teachers experience more frequently difficulties with classroom disturbances

than with preparation suggesting that this category describes a professional task which is difficult for most beginning teachers.

That instruction in class and interacting with colleagues are typical problems of (beginning) teachers is further supported by the result that we could not find interindividual differences in the experience of hassles and uplifts caused by socio-demographic or psychosocial characteristics. That means that not particular teachers experience more hassles and uplifts than others. Only for neuroticism we found an association with the overall experience of hassles. We go beyond the model of Almeida (2005), and Almeida and Wong (2009) by emphasizing the importance of daily positive events. Our results show, that beginning teachers report far more positive events than negative events and that only classroom management was experienced more negatively. Moreover, uplifts were negatively associated with daily emotional exhaustion. This suggests that it might be necessary to include not only negative but also positive events to receive a more complete picture of teachers' daily experience. Moreover, this finding challenges the almost widely accepted "reality shock" (Veenman, 1984) or "survival stage" (Fuller & Brown, 1975) of beginning teachers, which implicated a high stress exposure.

The results of our study might also have some practical implications. First, we showed that daily uplifts and hassles varied more strongly from day to day than between teachers. All teachers experienced positive and negative events and accordingly had more or less good and bad days. Therefore, it seems to be important for beginning teachers to know themselves and to reflect daily on their professional experiences. Second, we found that beginning teachers frequently experience hassles in social interaction situations, such as teaching or interacting with colleagues. We suggest that our findings might be considered in teacher education to improve the social-emotional competencies of prospective teachers (Jennings & Greenberg, 2009). In Germany, these competencies are not included in the standard curriculum for teacher education so far (Hohenstein, Zimmermann, Kleickmann, Köller, & Möller, 2014). Moreover, teacher training should provide opportunities for preservice and beginning teachers to learn how to deal with stressful situations and how to avoid them. For example, Dicke, Elling, Schmeck, and Leutner (2015) showed that training in classroom management skills, as well as in stress management, improved the well-being of beginning teachers. Furthermore, some studies showed that knowledge of classroom management gained during teacher education is also an important buffer of stress (Dicke, Parker, et al., 2015; Klusmann et al., 2012). Third, recent results have indicated that further education plays a minor role after graduation. However, previous studies showed that teachers' professional development has a positive association with their students' performance (e.g., Hattie, 2009; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Therefore, it may be important to undertake continuous professional development.

## 6. Conclusion

This study is one of the first using a diary method to assess beginning teachers' daily experiences and well-being. While previous research described the transition into teaching as very demanding, the present study showed that this is just one side of the coin. Beginning teachers experience not only negative events; on the contrary they report an even greater number of positive events that contribute to their well-being. Therefore, it is important to consider both negative and positive events when investigating beginning teachers' experiences and well-being. To conclude, beginning teachers experienced many ups and downs, resulting in more or less good and bad days with good days outweighing the bad days.

## Appendix A. Complete instruction for assessing daily uplifts and hassles

### What did you experience today?

Every day we experience enjoyable and less enjoyable situations. These may be small, unimportant events, or encounters that brighten or cloud the day, or large, significant events.

Please think back on today's events. What positive and negative experiences did you have today? Which events were enjoyable and less enjoyable? We are interested in what went on in both your working life and beyond. For example, a positive event might be "got a surprising phone call from an old friend" (non-work-related) or "was praised by a colleague/superior" (work-related). Negative events might be "got a parking ticket" (non-work-related) or "noticed I'd made a mistake in an important report" (work-related).

Please report on positive and negative events that occurred both in your working life and beyond. Write down those events that come to mind first! If you can't think of an event for a specific category, you can simply skip it by clicking on "Next."

## References

- Alarcon, G., Eschleman, K. J., & Bowling, N. A. (2009). Relationships between personality variables and burnout: A meta-analysis. *Work & Stress*, 23(3), 244–263. <http://dx.doi.org/10.1080/02678370903282600>.
- Almeida, D. M. (2005). Resilience and vulnerability to daily stressors assessed via diary methods. *Current Directions in Psychological Science*, 14(2), 64–68. <http://dx.doi.org/10.1111/j.0963-7214.2005.00336.x>.
- Almeida, D. M., & Wong, J. D. (2009). Life transitions and daily stress processes. In G. H. Elder, Jr. & J. Z. Giele (Eds.), *The craft of life course research* (pp. 141–162). New York, NY: Guilford Press.
- Bakker, A. B., & Bal, P. M. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83, 189–206. <http://dx.doi.org/10.1348/096317909X402596>.
- Becker, E. S., Goetz, T., Morger, V., & Ranellucci, J. (2014). The importance of teachers' emotions and instructional behavior for their students' emotions – An experience sampling analysis. *Teaching and Teacher Education*, 43, 15–26. <http://dx.doi.org/10.1016/j.tate.2014.05.002>.
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, 54, 579–616. <http://dx.doi.org/10.1146/annurev.psych.54.101601.145030>.
- Bolger, N., & Laurenceau, J.-P. (2013). *Intensive longitudinal methods: An introduction to diary and experience sampling research*. New York, NY: The Guilford Press.
- Borkenau, P., & Ostendorf, F. (1991). Ein Fragebogen zur Erfassung fünf robuster Persönlichkeitsfaktoren [A questionnaire for assessing five robust personality factors]. *Diagnostica*, 37(1), 29–41.
- Chan, D. W. (2002). Stress, self-efficacy, social support, and psychological distress among prospective Chinese teachers in Hong Kong. *Educational Psychology*, 22(5), 557–569. <http://dx.doi.org/10.1080/0144341022000023635>.
- Chaplain, R. P. (2008). Stress and psychological distress among trainee secondary teachers in England. *Educational Psychology*, 28(2), 195–209. <http://dx.doi.org/10.1080/01443410701491859>.
- Clarkson, G. P., & Hodgkinson, G. P. (2007). What can occupational stress diaries achieve that questionnaires can't? *Personnel Review*, 36(5), 684–700. <http://dx.doi.org/10.1108/00483480710773990>.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. <http://dx.doi.org/10.1037/0021-9010.86.3.499>.
- Dicke, T., Elling, J., Schmeck, A., & Leutner, D. (2015). Reducing reality shock: The effects of classroom management skills training on beginning teachers. *Teaching and Teacher Education*, 48, 1–12. <http://dx.doi.org/10.1016/j.tate.2015.01.013>.
- Dicke, T., Parker, P. D., Holzberger, D., Kunina-Habenschütz, O., Kunter, M., & Leutner, D. (2015). Beginning teachers' efficacy and emotional exhaustion: Latent changes, reciprocity, and the influence of professional knowledge. *Contemporary Educational Psychology*, 41, 62–72. <http://dx.doi.org/10.1016/j.cedpsych.2014.11.003>.
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, 51, 1058–1068.
- Enzmann, D., & Kleiber, D. (1989). *Helfer-Leiden: Stress und Burnout in psychosozialen Berufen [Stress and burnout in human service professions]*. Heidelberg: Roland Asanger Verlag.
- Fives, H., Hamman, D., & Olivarez, A. (2007). Does burnout begin with student-teaching? Analyzing efficacy, burnout, and support during the student-teaching semester. *Teaching and Teacher Education*, 23, 916–934. <http://dx.doi.org/10.1016/j.tate.2006.03.013>.



- Fuller, F. F., & Brown, O. H. (1975). *Becoming a teacher*. In K. Ryan (Ed.), *Teacher education. The seventy-fourth yearbook of the National Society for the Study of Education, Part II* (pp. 25–52). Chicago: The University of Chicago Press.
- Gavish, B., & Friedman, I. A. (2010). Novice teachers' experience of teaching: A dynamic aspect of burnout. *Social Psychology of Education*, 13, 141–167. <http://dx.doi.org/10.1007/s11218-009-9108-0>.
- Goddard, J. T., & Foster, R. Y. (2001). The experience of neophyte teachers: A critical constructivist assessment. *Teaching and Teacher Education*, 17, 349–365.
- Goddard, R., O'Brien, P., & Goddard, M. (2006). Work environment predictors of beginning teacher burnout. *British Educational Research Journal*, 32(6), 857–874. <http://dx.doi.org/10.1080/01411920600989511>.
- Goetz, T., Bieg, M., Lüdtke, O., Pekrun, R., & Hall, N. C. (2013). Do girls really experience more anxiety in mathematics? *Psychological Science*, 24(10), 2079–2087. <http://dx.doi.org/10.1177/0956797613486989>.
- Goetz, T., Lüdtke, O., Nett, U. E., Keller, M. M., & Lipnevich, A. A. (2013). Characteristics of teaching and students' emotions in the classroom: Investigating differences across domains. *Contemporary Educational Psychology*, 38(4), 383–394. <http://dx.doi.org/10.1016/j.cedpsych.2013.08.001>.
- Hattie, J. A. C. (2009). *Visible learning. A synthesis of over 800 meta-analyses relating to achievement*. London & New York: Routledge.
- Hebert, E., & Worthly, T. (2001). Does the first year of teaching have to be a bad one? A case study of success. *Teaching and Teacher Education*, 17, 897–911.
- Hohenstein, F., Zimmermann, F., Kleickmann, T., Köller, O., & Möller, J. (2014). Sind die bildungswissenschaftlichen Standards für die Lehramtsausbildung in den Curricula der Hochschulen angekommen? [Have the education standards for teacher training programmes arrived in the university curriculum?]. *Zeitschrift für Erziehungswissenschaft*, 17, 497–507. <http://dx.doi.org/10.1007/s11618-014-0563-9>.
- Huberman, M. (1989). The professional life cycle of teachers. *Teachers College Record*, 91(1), 31–57.
- Hultell, D., Melin, B., & Gustavsson, J. P. (2013). Getting personal with teacher burnout: A longitudinal study on the development of burnout using a person-based approach. *Teaching and Teacher Education*, 32, 75–86. <http://dx.doi.org/10.1016/j.tate.2013.01.007>.
- Iliis, R., Huth, M., Ryan, A. M., & Dimotakis, N. (2015). Explaining the links between workload, distress, and work-family conflict among school employees: Physical, cognitive, and emotional fatigue. *Journal of Educational Psychology*, 107(4), 1136–1149. <http://dx.doi.org/10.1037/edu0000029>.
- Ingersoll, R. M. (2012). Beginning teacher induction: What the data tell us. *Phi Delta Kappan*, 93(8), 47–51. <http://dx.doi.org/10.1177/003172171209300811>.
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491–525. <http://dx.doi.org/10.3102/0034654308325693>.
- Keller, M. M., Chang, M.-L., Becker, E. S., Goetz, T., & Frenzel, A. C. (2014). Teachers' emotional experiences and exhaustion as predictors of emotional labor in the classroom: An experience sampling study. *Frontiers in Psychology*, 5. <http://dx.doi.org/10.3389/fpsyg.2014.01442>.
- Kinnunen, U., & Leskinen, E. (1989). Teacher stress during a school year: Covariance and mean structure analyses. *Journal of Occupational Psychology*, 62, 111–122. <http://dx.doi.org/10.1111/j.2044-8325.1989.tb00482.x>.
- Klassen, R. M., & Durksen, T. L. (2014). Weekly self-efficacy and work stress during the teaching practicum: A mixed methods study. *Learning and Instruction*, 33, 158–169. <http://dx.doi.org/10.1016/j.learninstruc.2014.05.003>.
- Klusmann, U., Kunter, M., Voss, T., & Baumert, J. (2012). Berufliche Beanspruchung angehender Lehrkräfte: Die Effekte von Persönlichkeit, pädagogischer Vorerfahrung und professioneller Kompetenz [Emotional exhaustion and enthusiasm of beginning teachers: The role of personality, educational experience and professional competence]. *Zeitschrift für Pädagogische Psychologie*, 26(4), 275–290. <http://dx.doi.org/10.1024/1010-0652/a000078>.
- Klusmann, U., Richter, D., & Lüdtke, O. (2016). Teachers' emotional exhaustion is negatively related to students' achievement: Evidence from a large-scale assessment study. *Journal of Educational Psychology*. <http://dx.doi.org/10.1037/edu0000125>. Advance online publication.
- KMK. (2004). *Standards für die Lehrerbildung: Bildungswissenschaften* [Standards for teacher education: Educational sciences]: Beschluss der Kultusministerkonferenz vom 16.12.2004 [Decision of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany – KMK- of December 16, 2004]. Retrieved October 9, 2015 from <[http://www.kmk.org/fileadmin/Dateien/veroeffentlichungen\\_beschluesse/2004/2004\\_12\\_16-Standards-Lehrerbildung.pdf](http://www.kmk.org/fileadmin/Dateien/veroeffentlichungen_beschluesse/2004/2004_12_16-Standards-Lehrerbildung.pdf)>.
- Kyriacou, C., & Kunc, R. (2007). Beginning teachers' expectations of teaching. *Teaching and Teacher Education*, 23, 1246–1257. <http://dx.doi.org/10.1016/j.tate.2006.06.002>.
- Lavigne, A. L. (2014). Beginning teachers who stay: Beliefs about students. *Teaching and Teacher Education*, 39, 31–43. <http://dx.doi.org/10.1016/j.tate.2013.12.002>.
- Lazarus, R. S. (1984). Puzzles in the study of daily hassles. *Journal of Behavioral Medicine*, 7, 375–389.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer Publishing.
- Le Maistre, C., & Paré, A. (2010). Whatever it takes: How beginning teachers learn to survive. *Teaching and Teacher Education*, 26, 559–564. <http://dx.doi.org/10.1016/j.tate.2009.06.016>.
- Little, B. R. (1983). *Personal projects: A rationale and method for investigation*. *Environment and Behavior*, 15, 273–309.
- Lohmar, B., & Eckhardt, T. (2013). *The education system in the Federal Republic of Germany 2011/2012: A description of the responsibilities, structures and developments in education policy for the exchange of information in Europe*. Bonn: Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK). Retrieved April 2, 2015 from <<https://www.kmk.org/dokumentation-und-statistik/informationen-zum-deutschen-bildungssystem.html>>.
- Malmberg, L.-E., & Hagger, H. (2009). Changes in student teachers' agency beliefs during a teacher education year, and relationships with observed classroom quality, and day-to-day experiences. *British Journal of Educational Psychology*, 79, 677–694. <http://dx.doi.org/10.1348/000709909X454814>.
- Malmberg, L.-E., Hagger, H., & Webster, S. (2014). Teachers' situation-specific mastery experiences: Teacher, student group and lesson effects. *European Journal of Psychology of Education*, 29, 429–451. <http://dx.doi.org/10.1007/s10212-013-0206-1>.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual* (3rd ed.). Mountain View, California: Consulting Psychologists Press.
- Molenaar, P. C. M., & Campbell, C. G. (2009). The new person-specific paradigm in psychology. *Current Directions in Psychological Science*, 18(2), 112–117.
- Muthén, L. K., & Muthén, B. O. (1998–2012). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén & Muthén.
- Nicholson, N. (1984). A theory of work role transitions. *Administrative Science Quarterly*, 29(2), 172–191.
- OECD. (2005). *Attracting, developing and retaining effective teachers – Final report: Teachers matter*. Paris: OECD.
- Ohly, S., Sonnentag, S., Niessen, C., & Zapf, D. (2010). Diary studies in organizational research: An introduction and some practical recommendations. *Journal of Personnel Psychology*, 9(2), 79–93. <http://dx.doi.org/10.1027/1866-5888/a000009>.
- Peugh, J. L. (2010). A practical guide to multilevel modeling. *Journal of School Psychology*, 48, 85–112. <http://dx.doi.org/10.1016/j.jsp.2009.09.002>.
- Philipp, A., & Kunter, M. (2013). How do teachers spend their time? A study on teachers' strategies of selection, optimisation, and compensation over their career cycle. *Teaching and Teacher Education*, 35, 1–12. <http://dx.doi.org/10.1016/j.tate.2013.04.014>.
- Pianta, R. C., & Hamre, B. K. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational Researcher*, 38(2), 109–119. <http://dx.doi.org/10.3102/0013189X09332374>.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Reichert, M., & Pihet, S. (2000). Job newcomers coping with stressful situations: A micro-analysis of adequate coping and well-being. *Swiss Journal of Psychology*, 59(4), 303–316.
- Reis, H. T., & Gable, S. L. (2000). Event-sampling and other methods for studying everyday experience. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 190–222). New York, NY: Cambridge University Press.
- Richter, D., Kunter, M., Lüdtke, O., Klusmann, U., & Baumert, J. (2011). Soziale Unterstützung beim Berufseinstieg ins Lehramt. Eine empirische Untersuchung zur Bedeutung von Mentoren und Mitreferendaren [Social support at career entry for teachers: An empirical study on the importance of mentors and peers]. *Zeitschrift für Erziehungswissenschaft*, 14, 35–59. <http://dx.doi.org/10.1007/s11618-011-0173-8>.
- Scheuch, K., Haufe, E., & Seibt, R. (2015). Teachers' health. *Deutsches Ärzteblatt International*, 112, 347–356. <http://dx.doi.org/10.3238/arztebl.2015.0347>.
- Shen, B., McCaughy, N., Martin, J., Garn, A., Kulik, N., & Fahlman, M. (2015). The relationship between teacher burnout and student motivation. *British Journal of Educational Psychology*, 85, 519–532. <http://dx.doi.org/10.1111/bjep.12089>.
- Smith, T. M., & Ingersoll, R. M. (2004). What are the effects of induction and mentoring on beginning teacher turnover? *American Educational Research Journal*, 41(3), 681–714.
- Swider, B. W., & Zimmerman, R. D. (2010). Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational Behavior*, 76, 487–506. <http://dx.doi.org/10.1016/j.jvb.2010.01.003>.
- Tennen, H., Affleck, G., Armeli, S., & Carney, M. A. (2000). A daily process approach to coping: Linking theory, research, and practice. *American Psychologist*, 55(6), 626–636. <http://dx.doi.org/10.1037/0003-066X.55.6.626>.
- Tsai, Y.-M., Kunter, M., Lüdtke, O., Trautwein, U., & Ryan, R. M. (2008). What makes lessons interesting? The role of situational and individual factors in three school subjects. *Journal of Educational Psychology*, 100(2), 460–472. <http://dx.doi.org/10.1037/0022-0663.100.2.460>.
- Tynjälä, P., & Heikkinen, H. L. T. (2011). Beginning teachers' transition from pre-service education to working life: Theoretical perspectives and best practices. *Zeitschrift für Erziehungswissenschaft*, 14, 11–33. <http://dx.doi.org/10.1007/s11618-011-0175-6>.
- Uusiait, S., Harjula, S., Pennanen, T., & Määttä, K. (2014). Novice teachers' well-being at work. *Journal of Educational and Social Research*, 4(3), 177–186. <http://dx.doi.org/10.5901/jesr.2014.v4n3p177>.
- Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research*, 54(2), 143–178. <http://dx.doi.org/10.3102/00346543054002143>.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82, 183–200. <http://dx.doi.org/10.1348/096317908X285633>.



- Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). *Reviewing the evidence on how teacher professional development affects student achievement* (Issues & Answers Report, REL 2007-No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved May 10, 2016 from <<http://ies.ed.gov/ncee/edlabs>>.
- Zirkel, S., Garcia, J. A., & Murphy, M. C. (2015). Experience sampling research methods and their potential for educational research. *Educational Researcher*, 44 (1), 7–16. <http://dx.doi.org/10.3102/0013189X14566879>.